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ORIGINAL LECTURES.

ASPIRATION IN COMPLICATED CASES OF PLEURAL EFFUSION.

BY WM. PEPPER, M.D.,

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Reported by S. M. MILLER, M.D.

III.—INTRA-THORACIC CANCER WITH PLEURAL EFFUSION, ILLUSTRATED BY THREE CASES.

PLEURAL effusion may occur in the course of intra-thoracic cancer from the pressure of the tumor on one of the azygos veins, but more frequently it results from the pleura itself becoming the seat of cancerous disease. Cancer of the pleura, however, is rarely a primary disease, and in the three following cases it will be found to have arisen as an extension from adjacent tissues. It is also met with in cases of general cancerous cachexia.

Case III.—H. M., aged 42, colored, was admitted to the Philadelphia Hospital in the winter of 1867, with a scirrhous tumor of the right mammary gland, which was removed by Dr. Levis. The wound healed, and she was discharged. Later there was ulceration of the cicatrix, but this soon healed. Upon August 20 she was re-admitted to the ward, complaining of dyspnœa, without fever, cough, or pain in the side. Her respirations were thirty-two to thirty-five, pulse ninety; marked dyspnœa; respiration abdominal; expiration prolonged and wheezing; tongue moist and clean; no vomiting or diarrhœa; œdema of feet and ankles; left lateral decubitus; axillary glands enlarged and indurated.

Physical examination revealed percussion resonance fair at apex on right side, but impaired below nipple; on left side, absolute dulness from apex to base. The intercostal spaces level, but not bulging on this side. Deficient expansion of left thorax; over right lung expiratory murmur exaggerated. Clear and almost metallic bronchial breathing over whole posterior aspect of left side; sounds feeble and slightly bronchial in front, except over apex. Vocal fremitus diminished; heart-sounds healthy but feeble. Iodide of potassium, carbonate of ammonium, and tincture of belladonna ordered, with beef tea and milk punch. Later, pulse became slightly dicrotic, and heart dislocated to right of sternum. On September 5 paracentesis was performed. The needle was introduced into the sixth interspace, on a line with the anterior border of the axilla. Two quarts of dark, bloody serum were withdrawn. The fluid was highly albuminous, sp. gr. 1013, and deposited a thick, chocolate-colored sediment. The operation greatly improved all the symptoms. On September 7 the fluid again began to accumulate, and the symptoms returned with such severity that on the 11th paracentesis was again performed, and two quarts of reddish serum were drawn off, of much the same character as the fluid of the first drawing. Again the patient began to improve rapidly, and was almost convalescent, when, on November 9, her symptoms gradually aggravated, and on December 29 death occurred quietly.

Autopsy.—The *right* lung was quite free from pleuritic adhesions; there were, however, both on the costal and pulmonary layer, numerous cancerous nodules projecting into the pleural cavity. The pleura around these deposits appeared healthy. Upon making a section through any of these growths, they were found to vary in thickness from one line to one inch. Immediately beneath the right mammary region there were some prominent cancerous nodules. The pleural sac contained Ov of clear yellow serum.

The *left* lung was very much compressed and contracted. The pleura was much thickened, and the costal layer showed the same cancerous growths as on the right side. The pulmonary and pericardial pleura was also dense, thickened, and very tough. The tissue of the lung was condensed, but smooth on section, and apparently healthy. The pleural sac contained sero-sanguinolent fluid in much smaller quantity than the right. The entire extent of the diaphragmatic layer of pleura on both sides presented extensive cancerous growths.

The pericardial layer was also the seat of cancer.

The *heart* was somewhat enlarged, but the valves healthy. The *aorta* was of normal size.

The cancerous nodules were some scirrhous and others firm encephaloid. There was considerable fatty degeneration of the encephaloid growths, and not so much in the scirrhous.

Case IV.—Seen with Dr. Yarrow. The patient was 56, and free from the cancerous diathesis. He had suffered from bronchial cough and malarial trouble. On or about June 21, 1876, Dr. Yarrow was called to see him, and found marked effusion on right side, which caused violent orthopnœa. There was localized chest-pain, absence of respiratory sounds, and dulness on right side. These signs gradually diminished upon treatment, and he began to go about again, when there occurred a second effusion on September 15. There then appeared distinct prominences and severe pain. The signs of this last effusion never entirely disappeared, and the pain continued.

I saw him early in October. There was then great emaciation and profuse sweating. The pain was constant, and interfered much with sleep. There was dry cough; pulse frequent and feeble; right side of chest enlarged; movement impaired, but not lost; apex in front dull; resonance down to fifth rib; not so low on side. Posteriorly, flatness from spine to scapula down; feeble, distant breathing over dull area behind. Change of position produced no effect at all. A needle was introduced through eighth interspace posteriorly, on line of scapula, and one pint of clear serum drawn off. Towards the close the fluid was almost pure blood. This afforded much relief, but did not affect the physical signs. The heart was outside of nipple on left. No distention of veins. There was a second operation performed at same point, but with no results.

The prominences increased, and he progressively lost flesh and strength, and suffered great pain. On December 11, 1876, death occurred, preceded by slight œdema.

At the *post-mortem examination* the left lung was healthy, but congested, and the heart pushed towards the left side. A large mass of morbid growth lay in the anterior mediastinum, attached to the posterior surface of the sternum and to the outside of the pericardium. The sac contained about a gill of bloody serum. On the right side there were extensive cancerous masses. The mass on the posterior surface involved both layers of pleuræ, and also the superficial lung-tissue. The whole thickness of the diaphragm was also involved. At one spot the cancerous disease extended to the capsule and tissue of the liver.

There was no pleural effusion. The lung presented comparatively few cancerous nodules. At points it was intensely congested. At the point of first puncture there were pleural adhesions. The liver was enlarged, congested, indurated, and granular. The remaining abdominal organs were healthy. The body presented a moderate degree of emaciation.

Case V.—Mrs. McC., æt. 60, seen with Dr. J. G. Wilson. Patient had suffered some eight years ago with symptoms of cardiac disease and abdominal dropsy. This had been relieved, though after continued shortness of breath. For some months she had suffered from increasing dyspnœa, and more recently from symptoms of pleural effusion on the left side. She had been very fleshy, and, although she had lost some weight, was still a stout woman. There was intense orthopnœa, hurried breathing on the right side, and frequent, feeble, irregular pulse. Physical examination showed nothing abnormal on the right side, while on the left there were signs of effusion, reaching the second rib. The heart was pushed towards the right, and it was very difficult to detect its apex-beat. Indistinct systolic murmur could be heard. There was moderate ascites and marked œdema of the legs. The urine contained no albumen.

Paracentesis was performed, the point of selection being the seventh interspace in a line with the anterior border of the axilla. Eighty fluidounces were withdrawn, of which the latter part was slightly tinged with blood. Marked relief followed for a time, but there persisted considerable increase of dulness around the cardiac region, extending particularly towards the mediastinum. The relief was but brief, symptoms of effusion on the right side occurring, and the patient died a month after the operation.

The *post-mortem examination* showed extensive intrathoracic cancerous disease. There was a large mass occupying the anterior mediastinum and involving the anterior layer of the pericardium, which was nearly an inch in thickness. The pericardial sac contained ʒiv–v of blood-stained serum. With some roughness of the membrane, there was no valvular disease. There were scattered nodules of cancerous growth over the pleura on both sides. On the left side, the pleural sac was obliterated by adhesions. On the right side, the sac contained Oiii of blood-stained effusion, and there were numerous small nodules scattered through the substance of the lung.

Remarks.—In some cases the diagnosis of cancer of the pleura is very easy. Thus, as in Case III., if following an external cancer of the mamma, or elsewhere, dyspnœa and signs of increasing pleural effusion supervene without there having been any exciting cause of pleurisy, we may suspect the development of cancer of the pleura. So too in Case IV, the peculiar recurrence of effusion without apparent cause, the severe pain extending down the nerves of the right arm, the irregular distribution of percussion dulness, and especially the later development of the prominences described, enabled the diagnosis to be readily made.

On the other hand, in some cases the diagnosis is very difficult. This is particularly true when the pleura becomes affected in connection with primary cancer of the lungs, or as an extension from small and comparatively deep-seated mediastinal growths. Thus, in Case V., both the history and the marked evidences of cardiac disturbance made it probable that pleural effusion was due to cardiac disease.

The staining of the serum which was withdrawn, and the extensive dulness over the præcordia and the lower part of the mediastinum, aroused suspicions as to the existence of intra-thoracic growth. I

would dwell with particular emphasis on the value of the serum when mixed with blood as a sign of cancer of pleura. It is true that this may sometimes occur in cases of an inflammatory nature, and it not rarely happens that towards the close of the operation, particularly if severe cough has been excited, there may be a little blood mixed with the serum. But when the effusion throughout presents a blood-stained tint, showing that the blood has been previously effused, it should always call attention to the possibility of there being cancer of the pleura. It will therefore be seen finally that even when the pleural effusion does not supervene on external cancerous growth, a careful study will frequently reveal points leading to a correct diagnosis.

The existence of cancer of the pleura is no counter-indication to paracentesis if the effusion be large and cause severe dyspnœa. Even if the effusion be comparatively small and sacculated, great relief may be afforded, as seen in Case IV.; while, when the entire collection is removed, as in Cases III. and V., great good may be done, and it may even happen, as in Case V., that adhesions will form and prevent any return of effusion on that side. It is needless to say that such relief is at best palliative merely, and that the fatal progress of the disease will cause death either by extension to the opposite side or by the development of visceral growths. Both before and after the operation of paracentesis, which is so often called for in cancer of the pleura, the use of anodynes, either internally or hypodermically, is necessary for the relief of pain or paroxysmal cough which frequently attends cancer of the lung or mediastinum.

ORIGINAL COMMUNICATIONS.

CONTRIBUTION TO THE PATHOLOGY OF CHILDBED.

I.—A CASE OF IMAGINARY BLINDNESS IN CHILDBED.

BY M. LANDESBERG, M.D.

SINCE the attention of physicians has been drawn to the point, the cases of total blindness (amaurosis) or of considerable diminution of vision (amblyopia) suddenly appearing, either during gestation or in childbed, are no longer counted among the extremely rare and exceptional appearances which are observed during this period of involution of woman. This amaurosis or amblyopia may be either a permanent or a mere transitory disturbance. In the latter case vision may either be completely restored to its former power, or the recovery is but imperfect and a part of vision is destroyed. The causes of this permanent or merely temporary blindness, or considerable impairment of vision, are various. They may have their origin—1, in certain demonstrable changes either of the brain or of the eye itself; 2, in certain changes of the blood, which directly affect the genital organs, and secondarily by reflex action cause an alteration of the nervous action; 3, in a perturbation of the whole nervous system, in consequence of which either the light-perceiving or the light-transmitting elements of the eye are temporarily or permanently paralyzed, with total loss of function.

The first category embraces the amaurosis and amblyopia caused by hyperæmia of the brain, by uræmic blood-poisoning, and by embolic processes.

Among the last two we must place those cases of amaurosis or amblyopia which appear without any demonstrable ophthalmoscopic change.

We observe here the consequences only of a morbid disturbance, without obtaining an insight into the real nature of the pathological process. Our situation here is the same as in many other cases of amaurosis or amblyopia which are produced by other morbid conditions of the human body. Here, too, the connection between cause and effect now and then completely escapes our observation. I have in my mind the so-called pseudo-amaurosis, without any characteristic ophthalmoscopic evidences. In these cases, too, certain molecular changes in the nerves are doubtless the primary cause of the blindness. If the origin of such blindness is obscure, just as obscure and inexplicable remains as yet their course. For we cannot give any reason why in one case after a longer or shorter duration the amaurosis completely disappears, and vision returns, and why in another case total blindness is produced or vision is but partially restored.

So far, we have spoken of amaurosis and amblyopia, which, in fact, make their appearance in women during gestation or in childbed. But I would call attention to another form of amaurosis in childbed,

which until now seems to have escaped observation. In ophthalmological literature, as far as I am acquainted with it, I find no mention of such cases. Likewise, the text-books on gynæcology which I have consulted are silent on this point. It is, however, an open question whether any further research into gynæcological literature would meet with a better success. I base my right to establish a special form of puerperal amaurosis upon the observation of one case only. But this one case proves to me that it cannot be an exceptional one which chance should have thrown under my exclusive observation.

If similar cases have really not been observed, the explanation is that ophthalmologists are rarely called upon to treat diseases consequent upon childbed; and that obstetricians may sooner be led to mistake this form of amaurosis which I speak of with other forms of that disease.

The form of amaurosis which I treat of is not a real one, but imaginary, resulting from a peculiar state of the imagination of the patient. The eye which is said to be blind presents no signs of any morbid change, and is of normal vision. And yet the woman maintains that she is blind with that eye, and acts like a blind person whenever the other eye is closed. The possibility of intentional deception or of simulated amaurosis is entirely excluded. The patient is firmly convinced of the reality of her blindness, the physician may readily be misled, and to prove that we are only dealing with a case of imagination is difficult, and depends greatly upon contingencies. Should the proof fail, and the assertion of the patient be received as valid, the nature of the disease will be misunderstood all the more because the absence of all objective evidence and the temporary nature of the blindness tempt the physician to range such a case in that class of childbed blindness which is known to present no ophthalmological changes.

If we now attempt to give a proper conception, if not a complete explanation, of this form of imaginary blindness, we must consider the peculiar condition of woman which plays so important a part during the changes of her sexual life, both in gestation and in childbed: we mean hysteria.

Certain disturbances of the senses or of the mind occurring either during pregnancy or in childbed must be considered as a form of this singular neurosis, which we are wont to classify under the one generic name of hysteria.

In many cases they have their origin in some pathological state of the genital organs and their nerves, and must be considered as reflex phenomena. They exist as long as the original cause continues to act. The forms under which the psychical disturbances appear are manifold. That such a temporary mental disturbance may give rise to the idea of being blind of one eye is a supposition which must be admitted even by *a priori* reasoning.

The case to which I have repeatedly referred is as follows:

M. L., a day-laborer's wife, 33 years old, was brought to me, November 22, 1872, by her husband, her complaint being that she had lost the sight of her left eye in childbed. Patient, who had borne three times before, had, on November 8, been normally delivered of a healthy boy. She emphatically denies having sustained great loss of blood, or having had convulsions or fever. Since the fifth or sixth day after her delivery she complained that she could not see with her left eye. No attack of pain had preceded it. Patient asserts that she suddenly made the discovery of her blindness whilst she pressed her child to the right side of her face, thus covering her right eye. She could not state on which day she had lost her sight. The childbed took a regular course. On the eighth day patient left her bed and returned to her domestic occupations. She nurses her child, the supply of milk being plentiful.

Patient is of medium height, spare build, reserved and shy in manner, eyes always downcast, speaks only when questioned, and then extremely little. She takes her blindness as something inevitable, without complaint, and with a certain apathy.

Both eyes, in their external appearance, exactly alike. Mobility, curve of the cornea, reaction of the pupil, intra-ocular pressure, are normal on both sides. Either cornea has normal brilliancy, and the color of iris is deep blue. Right eye has vision $= \frac{1}{1}$, and Jaeger I. is read from $5\frac{1}{2}''$ to $10''$. Field of vision free. Left eye, according to statement of patient, has only perception of light.

An examination gives the following results. If the right eye is carefully covered, and the patient is requested to fix her left eye upon the light held at a distance of $8'''$, and to follow the different movements of the same, it becomes very unsteady and follows but very irregularly the movements of the light. Mostly the eye is not at all fixed, but rolls about with vacant stare. Sometimes the eye fixes the object centrally, but not in the periphery.

The statements of the patient in reference to perception of light are very uncertain and

unreliable. Repeated examinations gave no positive results. At one time perception of light would appear completely intact, and at other times the field of vision would seem to be defective. The woman bears these manipulations with much patience.

If both eyes are left free, the fixation of both is normal.

If now the right eye is excluded from the fixation, the left eye will either continue in its position, or it begins to make slight rolling motions, or it turns completely to the right or to the left, in which case the right eye executes the same motions beneath the covering hand. If the right eye was carefully covered, the patient placed in the middle of the room, and requested to come to the window, she at first refused to comply because she could not see with the left eye. When repeatedly requested to make a trial, she stretched out both arms before her, spread her feet, and bent her body slightly. In this manner, with diffident and anxious expression, she stumbled a few steps, and then stopped. The ophthalmoscopic examination gave no clue to the cause of this blindness. The background of both eyes presented exactly the same appearance, which did not deviate from the normal condition.

In the beginning of this long-continued examination the suspicion arose in me that I might possibly be dealing with a case of simulation. But I was compelled to give up this suspicion. In all cases of simulation there is a fixed sameness of statements. The simulants have carefully considered their answers beforehand, and move in the same circle of ideas. They are very suspicious, and take good care not to be confused by cross-questioning. Nothing of this kind was seen in our patient; she answered all questions instantly, and submitted without hesitation to all experiments.

Neither did the external circumstances afford any reasonable grounds for simulation, either from a morbid feeling of self-importance or aversion to work. The patient, living in modest circumstances, led a happy domestic life, and attended to her household duties all alone. Preoccupied by the care of her children and housekeeping, she bore the loss of her sight with great patience, and only when prompted by the expressed wish of her husband did she consent to consult a physician. There remained, therefore, but two modes of explanation for this blindness. This was either a case of real amaurosis occurring accidentally or in consequence of the childbed, the proximate cause being unknown, or I had before me a singular case of imaginary amaurosis to be regarded as an expression of that strange neurosis which we call hysteria. Even *a priori* reasoning excluded the probability of real amaurosis, though its possibility could not be denied absolutely. The condition of the patient during gestation and in childbed had been perfectly normal. Losses of blood had neither preceded nor followed. Lactation was likewise normal. Nor could any other cause be assigned for real amaurosis.

On the other hand, my attention was from the very first particularly attracted to the quiet, almost apathetic state of the woman, and her shy, retiring manner. To my question whether his wife had always been of such a disposition, the husband answered that since her last childbed he had noticed a considerable change in her conduct. She had always been of a quiet temperament, but now she was reserved, would speak but little, and avoided all company. She was active as ever, took the same care of her household, but her whole manner had become more passive, more mechanical. When the patient was asked about her condition, she said she felt perfectly well.

My impression that the blindness was probably delusive, confirmed, as it was, by the statement of the husband, caused me to proceed very carefully, and to endeavor, as far as possible, to discover the true cause of the affection. I directed the patient to call again the next day, when I again undertook a thorough examination, which, however, in every point resulted as before. This led me to the following reasoning:

If the blindness of the left eye is only fictitious, this fiction will chiefly take place whenever the right eye is excluded from the act of vision and the left eye is forced to see alone. Then arises a struggle between the sense of vision and the delusion of blindness, in which the delusion gains the upper hand and the real impression is overwhelmed. A similar affection, where we remain unconscious of the perceptions of our senses, is sometimes found in the normal physiological state. Take, for instance, the state of vision with the so-called vacant stare, in which we do not become conscious of the things around us, or the state of deep concentration upon one subject, when our faculty of perception seems to be insensible to any other object. In both cases either the pictures received by the retina do not produce a sensible impression or do not develop into objects of consciousness.

Now, as in our case the imaginary blindness is confined to the left eye, the patient, as long as both eyes are left open, has no cause to fix any particular attention on the left eye. The predisposing moment of the delusion is wanting, because the patient thinks that the right eye alone sees. If now, I continued to reason, the patient could be made to believe that she was using her right eye, when in fact this eye was prevented from seeing, and the perception of the objects, if at all, could be effected solely by the left eye, we would furnish the conditions in which the cause for delusion would be ex-

cluded and thus the impression received by the left eye would be transmitted to consciousness.

For this purpose I examined the patient in the following manner:

I held before both eyes blue-colored glasses, and made the patient read Snell's tables with binocular vision. Vision was then $\frac{15}{18}$. On closing the left eye the result was the same; on closing the right eye she said that she could only perceive the light. These experiments were repeated several times. In one attempt at reading, when the attention of the patient was completely absorbed in deciphering the letters, I suddenly changed the blue-colored glass of the right eye for another kept in readiness, one side of which had been coated with black. Notwithstanding the exclusion of the right eye, the patient continued her reading until she reached $\frac{15}{18}$: thus the proof was furnished that the left eye had the same vision as the right. This experiment was repeated several times, and always with the same result. These evidences were sufficient to convince me that this was a case of imaginary blindness.

But I refrained from communicating the true state of things to either the husband or wife,—to the wife, lest the delusion should be excited by a spirit of contradiction; to the husband, lest some remark might escape him which would produce the very result that was to be avoided. So I comforted the patient with the assurance that such cases of blindness were of frequent occurrence in childbed, that it would disappear without leaving any trace, and that vision would be completely restored. In order to strengthen her belief by giving some medicine, I ordered pills of iron to be taken for two weeks. I enjoined the husband to speak as little as possible with his wife about her condition, and to prevent all expressions of sympathy from friends and neighbors,—in short, to appear to attach no importance whatever to the whole affair.

When, two weeks afterwards, the patient entered my office, the great change in her manner at once showed that she must have recovered from her disturbance. In fact, the delusion had completely disappeared; the woman read fluently with each eye separately.

Whether the hysteria in this case was dependent on a certain pathological condition of the genital organs I am unable to decide, as no examination to that effect had been made.

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TETANUS — CHLORAL — DEATH.—Surgeon-Major F. Odevaim reports (*India Medical Gazette*, June, 1877) a case of traumatic tetanus in a muscular Sepoy, fatal in thirty-five and one-half hours in spite of the free administration of chloral, morphia, and stimulants.

PRELIMINARY NOTE ON A NEW MEDICINAL PLANT AND ITS ALKALOID.

BY H. C. WOOD, M.D.

SOME time since, I received from the Smithsonian Institute a letter containing some small, red beans, which had been sent there by Mr. Edmund Bellinger, Sr., of Texas. The beans were irregularly oval or roundish, about one-third of an inch in length, and had a slightly bitter taste, with an after-feeling of numbness, when chewed. Mr. Bellinger stated that they were occasionally used by the Indians in the neighborhood of San Antonio, Southwestern Texas, as an intoxicant; that a half bean would produce delirious exhilaration, followed by sleep which lasts two or three days; and that it was asserted that a whole bean would kill a man.

Mr. Bellinger has been kind enough to send me several small packages of the bean. It is the very imperfect results of this study which I now publish, hoping before many months to be able to lay before the profession an exhaustive report upon the drug or poison.

With the beans, there were in the first letter of Mr. Bellinger a few broken flowers. On submitting these to Dr. Rothrock, Professor of Botany in the University of Pennsylvania, he, after very little hesitation, pronounced them to belong to the genus Sophora; and comparison with the specimens of Sophora speciosa of Bentham, in his herbarium, left very little doubt that the beans are yielded by that tree.

I have made a partial chemical study of them, and have obtained in several ways, but in very small amount, an organic principle, which is exceedingly active as a poison, the minutest speck producing in two minutes almost entire paralysis in the frog. One-twentieth of a grain of a very impure specimen produced in a half-grown cat deep sleep lasting many hours.

As this substance is not soluble in water, but is soluble in acidulated water and is precipitated by alkalies, and as it dissolves freely in ether, imparting to it a decidedly alkaline reaction, it must be looked upon as an alkaloid. I would propose for it the name of *Sophoria*.

I obtained it of a grayish-white color, but did not succeed in crystallizing either it or its acetate. Its reactions, as far as I

have examined them, are as follows (the tests were made by placing a speck of the alkaloid upon a porcelain plate and applying the reagent).

With concentrated sulphuric acid, no color.

With chromic acid and concentrated sulphuric acid, a dirty, deep purple, passing rapidly into bright green, then into bluish and finally into yellowish brown.

With tincture of the chloride of iron, a deep, almost blood red, after a time acquiring an orange tint.

With nitric acid, no color.

With chromic and nitric acid, a very faint, evanescent reddish coler.

With nitromuriatic acid, a dirty reddish brown.

From the solution of its acetate, compound tincture of iodine throws down a yellowish precipitate.

I have made physiological experiments with an alcoholic extract of the bean upon the lower animals sufficient to outline its general action.

In *frogs* it produces a rapid loss of reflex activity and power of voluntary movement. The loss of power is not due to any action upon the motor nerve-trunks, as after death these were found to preserve their normal susceptibility. Further, tying the sciatic artery upon one or both sides of the frog did not influence the action of the drug upon either voluntary or reflex movements. This would indicate that the poison is a spinal sedative and has little or no effect upon either motor or sensitive nerves. In all cases the heart continued beating long after the cessation of respiration.

Upon *mammals* the effect varies somewhat in accordance with the dose. An amount of the extract estimated at two grains (?) produced, in a full grown tom-cat, in one minute marked weakness in hind legs, in two minutes inability to stand, with evident effect upon the respiration, in three minutes convulsive movements with loss of consciousness, continuing with ever-increasing embarrassment of the breathing for three minutes, when all attempts at respiration ceased. The heart kept on beating for one and a half minutes longer. The pupils were unaffected at first, afterwards dilated.

In small quantity the extract produces in the cat vomiting, great muscular weakness, profound quietude, and deep sleep. lasting some hours, and ending in recovery. In dogs the symptoms were similar to those noted in cats. Death always took place through the respiration. In a single cardiac experiment the drug had no decided effect upon the blood-pressure until towards death, but appeared to accelerate the cardiac beat.

SELF-SUSPENSION IN THE TREATMENT OF SPINAL AFFECTIONS.

BY BENJAMIN LEE, M.D.

THE number of this journal for April 28, 1877, under its heading "Gleanings from Exchanges," in a *résumé* of Prof. Sayre's remarks before the New York Academy of Medicine, on "The Treatment of Rotary Lateral Curvature of the Spine," credited to the *Medical Record* of that city, contains the following statement: "In such cases Dr. Sayre uses the method of self-suspension originally introduced by Dr. Mitchell of this city, in conjunction with the application of a plaster-of-Paris jacket."

The reporter has committed two unintentional errors here, which I desire to correct. First, as appearing in and extracted from a New York journal, the phrase "Dr. Mitchell of this city" would naturally lead to the supposition that the Dr. Mitchell referred to was a resident of New York. In point of fact Dr. Sayre had in his mind Prof. J. K. Mitchell, of the Jefferson School, a man to whom, whenever I have had occasion to write or speak in this connection, I have felt it both a pleasure and a duty to award full credit for the ingenuity and sagacity displayed in his treatment of spinal diseases, and whose memory I revere as that of an original worker and independent leader of medical thought. But—and this constitutes the second error—Prof. Mitchell did not originate, nor did he ever make use of, "*self-suspension.*"

I have before me his very interesting article in the first number of the *North American Medical and Surgical Review*, in which he describes a method, new in his time, but for which he does not claim entire originality, of removing the weight of the head and upper part of the trunk from the diseased vertebræ by means of direct traction upon the chin and occiput. This article is accompanied by engravings illustrating the precise form and manner of adjustment and employment of his appliances. In none of these does

the patient take any part himself in producing the traction or suspension. His participation is purely passive. Nor does the text convey any different idea. The severity of the direct force is meliorated by the intervention of a spiral spring at the end of the suspending rope, but modified in no other way. *Self-suspension*, or *modified suspension*, as I have termed it, as a means of active treatment for spinal deformities, was, so far as I know, introduced in this country by myself. My first experiments in direct suspension were in the year 1866.

In 1867 I published a small volume on Angular Curvature of the Spine, in which I described this mode of treatment in detail, claiming it as an accessory of great importance in the management of that disease.

Anxiety to devise some means whereby the thoracic deformity in Pott's disease might be diminished led me in the course of the following year to devise the simple but important modification which places the control of the force entirely in the patient's own hands, converting what was previously irksome confinement into a pastime, aiding in the development of the thoracic and spinal muscles, and giving the patient the benefit of exercise, while at the same time the spine is thoroughly protected. The form of suspension then contrived is essentially that described by Prof. Sayre at the meeting referred to. Under the familiar name of the "spinal swing" it has been one of the fixed pieces of apparatus in my Gymnasium for the Treatment of Spinal and Nervous Affections for the past nine years, and in a portable form has been supplied to a large number of my patients for use at home. In the summer of 1870 I had the honor of giving a clinical demonstration of the feasibility and value of this mode of treatment before the Medical Society of the State of Pennsylvania, in session in this city. The lecture which I delivered at that time appeared in vol. i. No. 4 of this journal for November 15, 1870, and was in 1872 published in a small monograph, entitled "The Correct Principles of Treatment for Angular Curvature of the Spine." At its close occurs the following statement, which I now italicize: "This mode of treatment is *equally applicable to lateral curvature.* In the incipiency of that affection, indeed, it may, *unaided, be adequate to work a cure.* By causing the patient habitually to take hold of the higher handle with the hand corresponding to the depressed shoulder, that shoulder is thus, for the time being, elevated, and its muscles thrown into more powerful action than those of the opposite side, while the curve of the spinal column, if not too rigid, is entirely reversed, and under any circumstances is diminished." In my gymnasium it has been used almost exclusively for true lateral or "rotary lateral" curvature.

During the meeting of the American Medical Association in Philadelphia the past summer, I demonstrated its use clinically before the surgical section, having caused one of my frames to be erected in the hall in which its meetings were held, in order to give Dr. Sayre an opportunity to apply his plaster-of-Paris jacket to a patient in the presence of the members. As may be seen by a reference to the Transactions, I then insisted on the importance of its daily employment, as in itself a means of treatment, and not simply as a temporary expedient for the better adjustment of other appliances.

1503 Spruce Street, Philadelphia.

NOTE ON THE ADVANTAGES OF *POSITION* IN DIFFICULT EXPECTORATION.

BY WM. S. KING,
Surgeon, U.S.A.

WHOEVER has been troubled with a cough attended with expectoration has probably been annoyed at times by the secretions floating up and down with the current of the inhaled and expired air, often clogging up the air-passages and occasioning a disagreeable sense of suffocation, and may remember that when quickly stooping down for any purpose, the offending matter has suddenly popped out upon the floor, thus giving immediate relief. By change of posture the law of gravitation has effected what might have otherwise required hours to accomplish.

As we are so apt to forget our experiences, my only object in this article is to record the *fact*, and call attention to the benefit that may be obtained by position only in many cases, especially in difficult expectoration.

This may appear to be a trifling matter; yet when we consider how much a *proper position*, either in bed or *out* of it, may add

to the comfort of the sick, its study may not be so unimportant as to be entirely overlooked.

NOTES OF HOSPITAL PRACTICE.

BELLEVUE HOSPITAL, NEW YORK.

CLINIC OF PROF. AUSTIN FLINT, SR., MAY 11, 1877.

Reported by P. B. PORTER, M.D.

CHRONIC BRIGHT'S DISEASE, WITH SACCHARINE URINE.

THE first patient whom I introduce to your notice to-day, gentlemen, is an aged woman who is suffering from chronic Bright's disease, her kidneys being probably of the granular contracted variety. The special feature of the case, however, on account of which I bring it before you, is that for the last week or more the urine has been found to contain a considerable amount of sugar. Now the question arises, Is this a case of true saccharine diabetes supervening upon chronic Bright's disease, or, if not, what relation has the Bright's disease to the phenomenon of sugar in the urine, which is now observed? Against the supposition that it is true diabetes is the fact that the amount of urine passed is less than normal (though of a high specific gravity); but this may be accounted for by the loss of secreting power on the part of the kidneys on account of the extensive nephritis present. I must confess, then, that at present I am not able to see precisely what connection there is between the Bright's disease and the saccharine urine: we only know that just now they both exist in the case before us. Sugar in the urine, as you are probably aware, is sometimes merely a temporary phenomenon; and when this is the case it does not seem to have any particular significance. The causation of the presence of sugar is not definitely understood; but I may say that in a certain proportion of cases that have come under my notice it seemed to be due to the fact that the persons in whom it occurred had been eating largely of sugar. This temporary presence of sugar in the urine, however, sometimes has one very bad result, and that is its moral effect upon the patient. There is in the community at the present day, and especially among a certain class of individuals, a well-defined horror of diabetes, which there ought to be some technical term to express, analogous to hydrophobia or photophobia. This is illustrated by the following case. Some little time since, I was consulted by a gentleman who I afterwards found was strongly inclined towards hypochondriasis, and, unfortunately, had more money than he could easily spend. He told me that he was afraid that he had diabetes; and on questioning him I found that he had read up all that there was to be found on the subject. Upon examining a specimen of his urine I discovered that, sure enough, there was some sugar in it; and I had the indiscretion to communicate this fact to him. From that time his peace of mind was entirely gone, and he not only entered upon a prolonged course of anti-diabetic diet, but employed a professional chemist to make daily analyses of his urine. Curiously enough, it was never again found to contain the slightest trace of sugar, and after a long period he became finally convinced that he was not the victim of diabetes after all. Quite a number of similar cases have come under my notice, and one of them occurred in a physician. Observing that he was passing rather larger quantities of urine than usual, he tested a specimen of it for sugar, and found, to his consternation, that it contained quite an appreciable amount. Soon afterwards he consulted me in an exceedingly despondent state of mind. I made a careful examination of his urine, and, not finding any sugar in it whatever, told him that it had probably been only temporarily present, and advised him not to think anything more about the matter. But it was useless to argue with him, and he went away under the firm conviction that he would ere long die of diabetes.

> "Convince a man against his will,
> He's of the same opinion still."

A few months afterwards I met him on the street, and I never saw a countenance more radiant with happiness than his. "Why, what has become of your diabetes?" said I. "Oh," he replied, "you were right. The sugar in my urine was only a temporary affair, after all." Such cases as these ought to warn us particularly not to be content with a single examination of the urine in any instance, but to repeat these from time to time until the condition is definitely ascertained. The house physician, Dr. Taylor, will now examine before you the urine of our patient, by means of Fehling's test, and we shall then see whether there is any sugar present to-day. (On

adding a few drops of urine to the solution boiling in the test-tube, a well-marked precipitate of the red suboxide of copper was immediately noticed, showing that there was a considerable percentage of sugar present.) Now, as to the treatment here. Considering that the patient is over eighty years of age, and is also affected with chronic Bright's disease, I should deem it inexpedient to use any very active measures in the case. We will, therefore, attempt only the expectant plan. I am inclined to think that the saccharine urine is simply a temporary complication; but it may possibly be due to the existence of true diabetes mellitus. At all events, we will wait to see what the future course of the case may be, in the mean while endeavoring to palliate any unpleasant symptoms that may arise.

CEREBRAL EMBOLISM.

At my last clinic, you will remember, we had a case of paralysis before us, which, after a careful differential diagnosis, we determined to be probably due to embolism. To-day I have a somewhat similar case to show you, and before the patient is brought in I will run rapidly over the history as written up by the house physician. The man's name is Martin B——, he is about forty years of age, and was admitted to the hospital on May 2. At that time he was found to be greatly emaciated, in a semi-comatose condition, and aphasic. His previous history was entirely unknown. You may ask, as I did, how could it be known that he had aphasia, if he was partially comatose? Well, it was found to be possible to rouse the patient to a certain amount of intelligence, when he gave evidence that he undoubtedly recognized different objects, but was wholly unable to call them by name, as far as could be made out. The existence of aphasia was, then, altogether probable, but perhaps would not be regarded as proven by many. The examination of the heart and lungs gave negative results. There was *no paralysis*, and sensation and reflex action, as well as the pulse and respiration, were normal, while the pupils were natural in appearance. Such being the symptoms of the case, what would you suppose to be their interpretation? The conclusion formed at the time of the patient's admission was that he was suffering either from thrombosis or embolism. If the attack had been sudden in its onset, it would be inferred that it was due to the latter, and, if more gradual, to the former; but, as I remarked, absolutely nothing was known of the man's previous history.

May 3 (the day after admission).—There is now marked facial paralysis of the right side. This would seem to point to thrombosis; but embolism might be present in addition. The man has no other paralysis.

May 5.—The right arm is completely paralyzed, and there is partial paralysis of the right lower extremity. There is also incontinence of urine. With the above history and symptoms, it is not very probable that we have to deal with a case of extravasation of blood; but in actual practice a differential diagnosis is not always so easily made as it sometimes seems to be done by the clinical teachers in the hospitals; and I believe that the latter are not infrequently responsible for the mistakes which young graduates make, for every case is by no means characterized by such prominent points as to render it an easy matter to decide as to its nature.

May 7.—The temperature has risen to 100⅘°. This is somewhat suspicious, and might perhaps induce us to consider whether this might not be due to an attack of cerebritis in connection with a clot.

May 8.—The temperature 99° to 98°. The paralysis of the right arm not so complete as before.

May 9 (yesterday).—The temperature normal. The arm is still further improved, but the paresis of the lower limb still continues without much alteration. (The man was now brought in.) Well, here is our patient. He is a German; and in this connection the question arises whether the "aphasia" which has been noticed was not really due to his inability to speak English. It has been ascertained, however, that he has been accustomed to speaking English as well as German. You will observe that the paralysis in this case is on that side of the body on which it usually occurs when associated with aphasia. The aphasia is shown by the fact that he can make sounds sufficiently audible, but is entirely unable to articulate words. When I tickle the sole of the foot on the affected side, you will notice that reflex action is unimpaired, and that even the toes of the other foot are also thus made to twitch.

In this case there is not much to do in the way of treatment: we have only to wait and watch to see what will turn up.

MITRAL DISEASE, WITH DILATATION.

I have asked the house physician, Dr. Taylor, to select for me a couple of cases of cardiac disease with enlargement, and told him that I would prefer one with mitral lesion and the other with aortic, if possible. Here is the first patient, a man of about thirty years of age. I have never seen him before, and all that I know about him is that he has some trouble about the heart. Now, let us see if by putting certain questions we can form any conjecture as to the nature of the latter. And, first, as to its etiology. How long has it been since you had an attack of acute rheumatism? He replies that he has never had rheumatism at all. I supposed that he would probably have given a rheumatic history; for, as you are aware, the great majority of cases of organic disease of the heart arise from rheumatic endocarditis. Our next inquiry is in reference to the first symptom noticed, and the patient informs us that it was shortness of breath, nearly a year ago. It has continued with more or less severity up to the present time, and is sometimes so urgent that he is unable to lie down. In addition to the dyspnœa, we find that he has had cough, with expectoration, and that he has had hæmoptysis five times since last January. (You will please remember that subacute bronchitis frequently occurs in connection with valvular disease of the heart.) Another symptom that has also been present is œdema of the feet. Now, do the features of the case which have just been mentioned point to mitral or to aortic disease? Let us take a vote on it. All those who think the former is indicated will please hold up their right hands. It is "carried by a large majority." Yes, all those symptoms point towards mitral lesions, and show a probable enlargement of the right side of the heart, due to this cause. Having thus attempted to form some idea of the nature of the case beforehand, I apply the stethoscope, and find that there is both a mitral direct and a mitral regurgitant murmur. Mitral obstruction is a lesion which would especially account for the hæmoptysis. On further auscultation, I find the aortic second sound very feeble, and that the pulmonary second sound is about four times as strong as that. This feeble aortic second sound shows that the ventricle contracts on an insufficient quantity of blood. The area of percussion-dulness over the heart is three or four times as great as that in the healthy individual; and it is safe to say that the dilatation now exceeds the hypertrophy, though not to a great extent. You will notice the apex-beat at a considerably lower point than it should be.

This patient has improved considerably since his admission to the hospital. There is now no œdema at all, and no lividity of the lips, as I am told there was formerly. There is no indication at present for digitalis, as the heart is acting very well. The object of treatment here may be briefly stated to be to put and keep the patient in the best general condition that the circumstances of the case will admit of. He should therefore have the best alimentation and in the largest quantities that he can possibly digest. In my opinion, it is far better to put too much into the stomach than too little; though I am aware that such views would not meet with universal acceptance. In addition to good alimentation, all the hygienic surroundings should be the best possible, and the patient should have just as much out-door exercise as he is able to take with comfort. Of course, we cannot expect to remove the mitral insufficiency and obstruction; and I would like to impress upon you that in practice it is quite as important to avoid doing what there is no indication for, as to do that for which there really is an indication.

DISEASE OF THE AORTIC VALVES.

Here is another cardiac case, the nature of which I do not know; though, as the last was one of mitral, perhaps we might infer that this would be one of aortic disease. Still, it would not be safe to trust to such a supposition; and, accordingly, we will endeavor, as in the last case, to find out what we can from the history and symptoms, before resorting to a physical examination.

Curiously enough, this patient, who is a woman in middle life, also states that she has never had rheumatism. Four years ago, she says, she began to have trouble in her chest, and the first thing she noticed was an unusual beating of the heart. You will note the difference here from the other case, in which the shortness of breath was the first thing that attracted the patient's attention. This palpitation is increased

whenever anything disturbs her, or when she takes much exercise. If the exercise is pretty active, she suffers both from palpitation and shortness of breath. She has some little cough and expectoration, but has never spit up any blood. There is some blueness of the lips, and some œdema. Well, let us take these various features of the case, and see what they point to. The palpitation is evidently the principal symptom, as she tells us that the cough is only of recent origin. Now, what is palpitation especially characteristic of? Aortic trouble, you say; and you are right. And now, having formed a conjecture as to the nature of the case from the history given, let us proceed to find out by exploration what is the exact character of the difficulty. First, you will notice that the apex is away off to the left, and considerably lower down than it ought to be. In listening here, I detect a slight mitral murmur, and it seems to be a direct one. Sometimes this occurs temporarily, where there is a regurgitant aortic murmur, as I find to be present in this case. In addition I am able to make out here the pre-diastolic murmur, which, as it does not seem to have any particular significance, I may perhaps be permitted to urge my claim to have been the first observer to discover. You will find it just after the first sound of the heart, and just before the second sound. There is, as you are aware, no very long interval between the two sounds; but it is long enough to note distinctly the murmur to which I have referred. There is no very great amount of aortic regurgitation in this case. The aortic second sound is not very feeble; but the pulmonary second sound I find to be decidedly loud.

ALLGEMEINES KRANKENHAUS, WIEN.

SERVICE OF DR. ALOIS MONTI.

Notes by C. W. Dulles, M.D.

DIPHTHERIA.

THERE is a vast difference between the circumscribed and the diffused forms of diphtheria. The former is not very dangerous, it seems to be superficial, its membrane is easily removed; the latter is extremely dangerous, its action is deep, its membrane is tough, of disgusting odor, adherent, and leaves a bleeding place when removed. Its danger consists not only in the obstruction to respiration, but in the blood-poisoning.

The treatment must be as follows. When recent, with redness and swelling of fauces, use cold applications to the neck, and give pieces of ice to be held in the mouth and swallowed. Later, when the membrane is formed, use irrigations of water upon the parts. The main points to be attained by these are cleanliness and coolness, which are of the utmost importance. To the water may be added with great advantage two per cent. of chlorate of potassium, or one may use this prescription:

℞ Sodii salicylatis, 4 grammes;
Aquæ fontis, 200 grammes;
Spts. vini rectificati, 1 gramme;

which should be injected against the walls of the fauces and pharynx every two or three hours.

When the membrane is thick and very ill-looking, it should be removed with a piece of sponge held in the forceps or attached to a stick. The sponge may be moistened with water or tinct. iodini.

Dr. Monti thinks very highly of the action of a remedy called *Ethylsantogensäureskalium*, which he uses as an irrigant in half per cent. solution in water.

Cauterants he holds to be injurious, as they irritate the inflamed parts.

General treatment must be most scrupulously carried out. He uses quinine, iron, and salicylate of soda.

Quinine he uses at first in doses proportioned to the fever, varying also with the age of the child.

The most careful and sustaining nourishment must be given to the little patient,—milk, soup, wine, and meat juice. He recommends as a beverage:

℞ Potassii chloratis, 3.00;
Aquæ fontis, 200.00;
Syrupi, 25.00;
M.—Sig. Use as a drink.

PROLAPSUS RECTI.

This is a rare condition among children. It is of varying grades, as of part of the mucous membrane, or the whole of the rectum up to the sigmoid flexure. The latter is usually after the former has been allowed to pass unnoticed for a long time. In most cases, however, we find only a partial prolapse occurring after constipation. Catarrh of the large intestine may be a cause of prolapse, by the frequent stools and the tenesmus occurring coinci-

dently with the wasting of the muscular part of the intestine. In rachitic children* with such a catarrh it not infrequently occurs, disappears for a while, and reappears with the exacerbation of the catarrh. Such cases are best treated by treating the intestinal catarrh, and by irrigation of the intestine with water, beginning with a temperature of 24° to 22° (C.) and descending to that of fresh spring water.

In chronic cases astringent irrigations with solutions of alum and tannin should be used.†

Such are also benefited by local treatment with cauterants. The prolapsed bowel may be lightly touched with nitrate of silver in substance, making a circle round it and radiating lines along the axis of the intestine; after this it should be replaced and confined with a suitable bandage. This should be renewed every three days for three or four weeks. If such proceedings do not effect a cure, one should use the hot iron, especially when the prolapse has lasted long and the sphincter ani is paralyzed. The irons used should be small and applied at the line where the mucous membrane covers the common sphincter. Strychnia and nux vomica by hypodermic injection or suppository he does not think of much value.

The replacement of a prolapsed rectum requires care. If a child is alarmed and screams and strains, it is best to anæsthetize him first. One must not maltreat the intestine with futile manipulations. When the intestine is replaced it should be secured with a retainer of some sort. Dr. Monti uses, and thinks better than any of the more complicated appliances, a series of strips of adhesive plaster, which cross over the mons veneris and the anus, constituting a sort of artificial sphincter. Through the part opposite the anus he cuts a hole, through which the stools pass quite well, and yet the application prevents the protrusion of the rectum.

* Of whom there are an enormous number in Vienna.—D.

† Irrigation of the large intestine, as practised by Dr. Monti, impresses one as a very valuable therapeutic measure, and acts remarkably well in his hands. It is done thus. To an apparatus like that used in Thudichum's douche, so as to secure available and easily controlled hydrostatic pressure, he attaches an elastic catheter. The child is laid on its back with its hips elevated, and he insinuates the catheter into the rectum, allows the water to flow, and as the rectum becomes distended he gently pushes the catheter along until it is well past *the sigmoid flexure*. Then the water, flowing in, fills the whole of the large intestine all the way to the cœcal valve. One who has seen this measure practised by Dr. Monti cannot doubt that criticism adverse to its feasibility and utility must have originated in a failure to carry it out as he does.

TÆNIA.

In the treatment of tape-worm Dr. Monti objects to many of the most frequently used vermifuges, on account of their disgusting taste and the large quantities required. If they produce vomiting on their first employment, they should not be repeated. Others should be found, since their continuance may do the child much harm and fail to accomplish the object. The decoction of pomegranate rind comes under this head. An electuary of the ethereal extract of pomegranate rind (Ph. Austr.) may be used. The new preparation called "*filix acid*" he characterized as dear and useless. The best remedy we have is koosso. The compressed pastilles of koosso flowers, from Erlangen, are unsurpassed in usefulness. He has found no difficulty in their employment; and ten grammes he thinks infallible. The alkaloid *koossine*, if quite pure, is more convenient, because the dose required is smaller; two grammes to five grammes, according to the age of the child, are sufficient. With these two there is no need for any preparatory treatment, and if the head of the tænia does not come away the first time, they may be repeated the next day. Children take them as if they were sugar-plums, and they do not cause nausea or vomiting, nor are they followed by persistent diarrhœa.

Semina cucurbiti from Mexico are said to be very effective, but he has never been in a position to test their value.

Of mechanical treatment alone he does not think much. It may be of value by emptying the large intestine and clearing the way for the other remedies. He uses an enema of one to two litres of water one evening, the next morning he gives the medicine, and in two hours another enema.

TRANSLATIONS.

ENORMOUS EPITHELIOMA OF THE SCALP IN A YOUNG MAN.—M. Louis Saint-Ange reports the following case (*Le Progrès Méd.*, 1877, p. 473). The patient, who was a pork-butcher, 24 years of age, said that he had had, since his thirteenth year, on the parietal region of the right side, to the back and near the median line, a tumor the size of a large pea, indolent, and of somewhat firm consistence. This tumor

began suddenly during 1874 to grow larger without appreciable cause. Consulting a physician, Vienna paste was applied around the border of the tumor, the operation being completed by the aid of a bistoury, and the tumor removed. The wound healed very slowly. In January, 1875, he first came to the hospital, when the small wound still remaining was cauterized with nitrate of silver, and soon healed up. In April, the cicatrix, having been much rubbed by the hat, broke open again, and, in spite of cauterizations and epidermic grafts, remained unhealed, a small tumor gradually developing in its border. In March, 1876, a second tumor formed beside the first, and soon became the larger of the two. These tumors were removed by the knife, but were pretty soon reproduced. Towards the end of 1876 some hemorrhages took place from the tumors, but the patient suffered no pain, and continued in good health, the tumors meanwhile steadily increasing in size. In March of the present year he entered the Hospital de la Pitié under care of M. Léon Labbé, when the following appearances were noted. In the right occipito-parietal region there existed a tumor the size of the fist, which was continued beyond the median line by another tumor of similar aspect, the size of a pullet's egg. These tumors were hard, their entire surface was ulcerated, irregular, vegetating, and somewhat friable. They bled abundantly on the least touch, but the hemorrhage was easily controlled by compression. The skin and bone around the tumors was healthy. The patient was in good health, but pale from repeated hemorrhages. Ablation was performed on March 20, by the aid of the thermo-cautery and the knife combined. The patient made a good recovery, and up to the present time shows no sign of return of the disease. Microscopic examination showed the tumor to be an epithelioma. X.

ERUPTIONS OCCURRING IN THE COURSE OF SURGICAL SEPTICÆMIC AFFECTIONS.—M. Terrillon (*La France Méd.*, 1877, No. 47) contributes notes of a case of this kind, to which are added reflections on the condition in general. He cites Verneuil as giving the following conclusions in a work published by him in 1868. 1. In pyæmia the skin may become the seat of various eruptions. 2. This symptom is rare, judging from the silence of authors. 3. It is the herald of approaching death. Braidwood, in his work on Pyæmia, published the following year, gave considerable space to a description of these eruptions, laying particular stress upon a variety resembling erythema. It is characterized by a redness of the skin invading the limbs and trunk, and of a bright-red color. After having lasted five to eight hours, it disappears. In general it shows itself on the third to fifth day after the appearance of the first chill. This eruption corresponds with the scarlatiniform rash of the French. Various other authors subsequently published cases, an analysis of which shows, according to M. Terrillon, that these eruptions may be classed under two heads: one class supervening upon surgical operations, especially those performed about the urinary passages. These are very various in form, ranging from simple erythema to the most marked pustules. The other class appear in the course of purulent infection or septicæmia. The latter are less various in appearance, the scarlatiniform variety being most common. T.'s case, of which notes are given, was that of a man who had been severely burned. Six days later he had a very slight chill, and on the following day a diffused, raspberry-colored, scarlatiniform eruption appeared on the thighs and abdomen, which spread gradually over the remainder of the body. The temperature, which had increased very slightly during the evolution of the eruption, rose on the ninth day, from which time the patient showed evident signs of pyæmia. The eruption became much lighter towards the end, except in the neighborhood of the trunk, and the patient died on the fourteenth day.

Microscopic examination of pieces of the diseased skin, taken away the evening before the patient's death, showed no signs of inflammatory change,—only congestion.

T. considers his case particularly interesting from a prognostic point of view, because the eruption appeared some time before the first sign of purulent infection. The fact of a previous chill having occurred was not noticed by the patient, who only remembered it after questioning. The fact that the eruption appeared the next day after the chill, instead of four or five days, as in Braidwood's cases, is also of interest.

The question of scarlatina need scarcely come up in these cases, since all other symptoms of this affection are wanting.

Nevertheless Terrillon prefers the term scarlatiniform to designate this eruption, rather than erythema, employed by Braidwood, on account of its appearance and mode of evolution. The scarlatiniform eruption described by Forget, Smith, and Sée as occurring in children operated upon during an epidemic of scarlet fever, Terrillon regards as nothing more than the latter disease itself, unchanged in any essential characteristic. Terrillon concludes with Verneuil that when after a surgical operation or a traumatic lesion a scarlatiniform eruption appears, pyæmia is to be feared. When this eruption has been preceded by a chill, however slight, the prognosis is extremely unfavorable. x.

PREPARATION OF NITRATE OF PILOCARPINE.—M. A. Petit made the following note at a meeting of the Société de Thérapeutique (*Bull. Gén. de Thérap.*, 1877, p. 524): "I have succeeded with great facility in obtaining nitrate of pilocarpine beautifully crystallized in flattened plates and perfectly white, by the following process. Jaborandi leaves are exhausted by displacement with alcohol of 80° containing eight grammes of hydrochloric acid to the litre. The alcoholic liquor is distilled, and the extractive residue is dissolved in distilled water, a considerable quantity of resin separating. Ammonia in excess and chloroform are added to the alcoholic solution, the chloroform taking up the pilocarpine. The impure pilocarpine obtained as a residue by distillation of the chloroform is exactly saturated by dilute nitric acid. The filtered liquid evaporated over a water-bath gives a dark-colored crystalline mass of nitrate of pilocarpine. This is placed in a cylindrical displacement apparatus, slightly pressed down, and lixiviated with cold alcohol, which dissolves the coloring-matters, leaving the crystals already quite white. To obtain fine crystals, these are dissolved in boiling absolute alcohol with the addition of a few grains of animal charcoal, then filtered, when, on cooling, perfectly white magnificent crystals of nitrate of pilocarpine are thrown down. The percentage obtained by this process is considerable." M. Petit has obtained five grammes of nitrate of pilocarpine from one kilogramme of jaborandi. The nitrate of pilocarpine has a power for the ray *D* equal to 76°. It gives with chloride of gold a precipitate formed of beautiful needles, and with chloride of platinum of fine prismatic crystals in stellate groups. These salts permit the determination of the equivalent of this alkaloid. Nitrate of pilocarpine is soluble in eight parts of distilled water at 15° (59° Fahr.), very slightly soluble in cold absolute alcohol, but soluble at the boiling point in about seven parts of the same alcohol. x.

PSORIASIS AND EPITHELIOMA.—At a recent meeting of the Société de Chirurgie (*Bull. Gén. de Thérap.*, 1877, p. 321), M. Tillaux called attention to certain cases of psoriasis which he thinks may turn out to be the first stage of epithelioma. As regards psoriasis of the tongue this has already been asserted; but M. Tillaux brought forward a case occurring in another region. He operated recently upon a patient suffering from an enormous epithelioma situated on the back at the juncture of the dorsal and lumbar regions, nearly over the median line. Although the mass was as large as the top of a hat in diameter, the patient suffered little. He had consulted Hardy in 1866, who called the affection an *isolated patch of psoriasis*. Two years later he returned again to Hardy, who repeated the opinion. In December, 1870, he saw Bazin, when the diagnosis of *adenoma, ulcerated in the centre*, was made, which was changed a little later to "*cancroïde*." M. Tillaux operated on this patient a month or so ago,—that is, ten years after the appearance of the psoriatic patch,—removing the entire mass. Only the skin was involved. Microscopic examination showed degeneration of the sudoriparous glands. Other members of the Society pointed out that the so-called psoriasis linguæ has no connection with psoriasis of the body, and that the latter often exists for years without resulting in epithelioma. In M. Tillaux's case the supervention of epithelioma seemed to be regarded as merely a coincidence. x.

ARREST OF EPILEPTIC ATTACKS.—An epileptic woman experienced a peculiar sensation in the pit of the stomach previous to each attack, which seemed to pass upwards under the sternum, and then downwards again before the onset of the fit. By swallowing a quantity of common salt in good time, a decided excitation was set up in the gastric mucous membrane, which seemed to act reflexly in preventing the spasm. In similar cases where the aura is sufficiently prolonged and marked, Meyer recommends large doses of quinine. —*Centralbl. f. Med.*, 1877, p. 160. x.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, AUGUST 4, 1877.

EDITORIAL.

WISDOM FOR THE DOG-DAYS.

PHILOSOPHERS have defined man as the animal that talks,—that laughs,—that wears clothes,—that worships; but in all this their plummet-line has never touched the bottom of his being, or reached the essential of his attributes. He is the animal that wastes. The fish of the sea disappear before him, rotting by tens of thousands on the shore; the innumerable buffalo whiten with their bones the prairie, and are not. At times, fiercer and wilder than any torrent, his nature breaks forth in a way that no savage beast can imitate. Fire alone is swift enough for his use: its ruin and blackness can alone appease his lust.

It is not, however, occasional phenomena such as these which show most forcibly how deeply the passion for wasting is centred in man. In his daily life of toil, he works that he may waste. He degrades, tramples upon, starves humanity, drives it to strikes and riots, that he may waste. The waste of the world saved would make it a paradise, and all men rich.

We remember watching with cynical delight a knot of total abstainers, at a large party, who were, with great gravity, severity, and sorrow, commenting upon the yearly waste in alcoholic drinks, and who the next moment were gorging themselves with terrapin at twelve dollars a dozen, said abstainers having already eaten that day more food than their bodies required.

As a man, the editor of the *Times* also fulfils his destiny and bears his load of the great mountain of waste. At the present moment (11 P.M.) he is writing by impure, expensive, and detestable gas, yellow and flickering, hot and mosquito-drawing, instead of by the cool, fresh, costless light of to-morrow at 6 A.M. It is said that in London alone there are 2,250,000 gas-burners, burning on an average 730 needless hours a year, and consuming each 2200 feet, or, *in toto*, 5,000,000,000 cubic feet of gas annually, costing, at current rates, about $4,500,000.

Alcohol, food, light,—simple by-plays in the carnival of waste. Alcohol has its rival in gas, and gas in superfluous food, and superfluous food in useless clothing, and useless clothing in still more useless trinkets, and these in a thousand other things, and man remains, above all things and creatures, king of the waste.

IF there be any practice of the human animal more indefensible than all others, and more complete proof of the total depravity of the race, as insisted upon by theologists, it is the power which fashion has over the article of clothing. Being of the masculine sex, and having a great desire to suffer no more in this world than is necessary, and being further convinced that it is the mickle ills which together make the muckle sorrows of life's woes, we are thankful that in this country the revolt of the stronger sex against set forms of dress has been so wide-spread and successful.

Our transatlantic brethren do not seem equally emancipated; and we groan for them and with them. The London *Lancet* asserts, "There are probably few physicians who would have the hardihood to present themselves at the door of a patient covered with a felt, or even a straw, hat, let the sun's rays be ever so unbearable," and that "it is probably vain to hope the dress of highly-civilized men and women will ever be determined by considerations of science and convenience." With high-heeled shoes and other similar abominations pattering over our entry floor or parading the street before our office window, we cannot say much for women; but for men we think the bands of

social custom are already so far relaxed in this country as to allow of the almost immediate adoption of any really valuable change of attire, and the usual dress of an American gentleman seems to be both sensible and convenient.

CORRESPONDENCE.

LONDON LETTER.

THERE is very little going on here in the medical world, so it may be well to give your readers some fairly definite idea of the state of the profession in England, Scotland, and Ireland. Here we have two distinct classes of medical men,—the general practitioner and the consultant. The first is ubiquitous, as may be supposed, while the latter is necessarily confined to towns. Of old, a man almost invariably commenced as an all-round man, and then developed into a consultant as time went on and opportunity served. A man got a practice and a reputation, and then his advice was sought by the patients of other medical men to supplement theirs, or he was called in by the practitioner when needing a second opinion. Thus a man gained his reputation for himself according to his experience. But now the matter is different, and a considerable number of men set out from the first with the intention of being consultants whether they have had any experience or not. Of course, in order to do this they must possess considerable private means, an essential matter. A number, however, still gradually develop themselves from the lower grade, and these men as a rule are the more active-minded of the consulting body, —as Sir William Jenner, for instance.

Perhaps the most lucid explanation of the complex relations of the members of the medical profession to each other will be furnished by giving a brief description of the licensing bodies of Great Britain, and the men who present themselves before them. Thus, in London there is the well-known Royal College of Surgeons, with its two diplomas, the membership or general portal, taken by all to commence with; and the fellowship, the higher diploma, which is taken by examination, and a very severe examination too, by the young men who aspire to remain about the London hospitals or to go into prominent positions in the larger provincial towns. The fellowship is also given to a certain number of men who have distinguished themselves, and who are always middle-aged at least; but this is not to any great extent. Then there is the Royal College of Physicians, with three grades. The first is the license to practise, only recently instituted, and the second, the membership, the stamp of a man who has left general practice, or never intends entering it; the third, the fellowship, confers no further privileges, but merely forms a more select circle, who furnish the examiners and other officials, and to whom belong exclusively the right to give the different lectures before the college, and the pecuniary rewards of examinerships. The college guarantees the conduct of its members and fellows, and rebukes such as offend against its by-laws; and if any members should pursue a course of conduct of which the fellows disapprove, woe to their hopes of ever being made fellows. There are some of the best-known names in London who cannot put F.R.C.P. behind them, and never will; though some evade the difficulty by getting the Fellowship of the Edinburgh College, which is not so strict about its English fellows. The membership of the College of Physicians, and the fellowship of the College of Surgeons, are the marks of the higher men, and are absolutely requisite for any appointment on the staff of hospitals of any reputation. They are the portals through which all consultants must pass for the best metropolitan hospitals, though not for all the provincial ones: a man may have his M.D., etc., from anywhere he likes: these are not essential, they are only auxiliary. Then there is a third body, the old Society of Apothecaries, whose license (L.S.A.) was once the only legal qualification, but which has now fallen considerably, and is taken only by men who must have a medical as well as a surgical qualification in order to hold poor-law appointments; men who funk the license of the College of Physicians go in for the L.S.A., so that it is now almost exclusively taken by an inferior class of men, though a few take it in an emergency till they can pass the L.R.C.P.

Such are the English examining bodies not being universities. Of these latter there are Oxford, Cambridge, Durham, and London. The three first have teaching schools attached to them, but they turn out a very limited number yearly; while the London University is simply an examining body, and is not particular where the examinee has gained his—now it must be written *his* or *her*—knowledge, provided the knowledge is forthcoming and the stipulated course of education has been complied with. The examinations of the London University are severe and searching, and a graduate thereof usually holds himself (there is no herself yet) to be quite an upper-crust individual. Most men now who aspire to hospital appointments take the M.B. and M.D. London in addition to the Membership of the College of Physicians or the Fellowship of the College of Surgeons.

These different examining bodies do not require attendance at any particular medical school, so long as their course of study has been completed and the examinee has the requisite certificates of his attendance on lectures, etc. The medical schools in the provinces—as Birmingham, Leeds, Man-

chester, Liverpool, and Bristol—educate, but do not examine.

The medical school at Newcastle-on-Tyne is now intimately connected with the University of Durham. The men who come up from the provincial schools generally know a lot more of actual practice than the London-taught men, except where these are sons of medical men, or, more rarely, have been apprenticed. The old scheme of apprenticeship, which recognized that medicine was an art as well as a science, is now almost entirely fallen into disuse, a fact many regret.

The course of study required by these different examining bodies is not uniform, and some diplomas permit of a briefer course of study than others. This produces much professional uneasiness, as when a man has once got a diploma he can practise anything and anywhere. Consequently, there is much agitation going on for a "State examination," which alone shall confer the right to practise, leaving each man to go in for higher qualifications in addition, or to let them alone, as he likes; just as a man requires to give evidence of at least two years' work in actual practice after taking the degree of M.B before he is admitted to the M.D.; and in the case of the membership of the College of Physicians, a stiff and thorough examination, including clinical examination in the wards of a hospital, is necessary, no matter what a man's qualifications or his experience.

From this bird's-eye view of the subject it will be seen that some men are educated straight away for the higher grades from the first, while others struggle into the higher grades after more or less experience of a humbler position. From the first class are drawn the greater proportion of the teaching staff of each metropolitan medical school; and these men are usually sound teachers of what is required for the different examinations, though they often are unknown beyond the walls of their hospital and school. These men are largely persons of means and of some social standing by birth, and are exactly in the position of men who join the army, the church, or the law in order to have something to do in life and to add somewhat to their income. They usually have the advantage over others in the start in life, but they do not commonly hold the same prominent position at the finish. The man who has had a harder and more arduous career as a rule overtakes them as middle life is reached, and the more severe training tells in what is vulgarly termed "the long end." But those men who have social position, friends, influence, and means, get away better at the start of the race of life; and this class of men is on the increase, at least in London, Edinburgh, and Dublin; but whether this is well or unfortunate for the profession it is not at present possible to say. It must not, however, be supposed that the metropolitan hospitals are so suicidal as to reject all talent of an impecunious order; and now scholarships are being instituted so that enterprising but poor students may be enabled to pursue their college career, and even to remain about the place till something turns up for them, private tuition adding something more to their income.

Now for the Scotch schools. There stands first the University of Edinburgh, of world-wide renown. It now confers degrees medical and surgical. The first step is the M.B. and C.M. These degrees have been instituted of recent years,—since 1868,—and are taken after the ordinary course of study, instead of the M.D. as of yore. Two years of actual practice are required before the M.D. can be taken; and in addition a medical thesis is absolutely necessary. This is peculiar to Edinburgh amidst British universities, and is creditable to it. It must be upon some medical or surgical subject, and if not up to the mark the candidate is rejected on it; so that it is not a mere idle form. It compels a man to work at something and to formulate his ideas, and often furnishes the groundwork of special labor in after-life. In the old days, when there were no means of getting an M.D. in London, it was usual for enterprising men to go to Edinburgh for a winter session and so qualify themselves for graduation; but since the formation of the London University this practice is largely fallen into disuse.

In Edinburgh there is also the Royal College of Physicians, with three diplomas: (1) the license; (2) the membership; and (3) the fellowship. The two latter are confined almost entirely to local men, but a few are to be found in England; but the license is largely found across the border, as, until the London College created the license diploma, it was the most reputable medical diploma procurable without residence.

Then there is also the College of Surgeons, with two diplomas, the license and the fellowship. These are almost exclusively Scottish, and are good qualifications. Then there is also the ancient University of St. Andrew's, which grants ten doctorates of medicine yearly to the most deserving applicants, without residence or other examination than on practical subjects, provided they are over forty years of age and are suitably recommended. It also grants the ordinary M.B. and C.M. Many of the best men in England hold the M.D. of St. Andrew's, and these St. Andrew's graduates have a yearly volume of Transactions. Then there is the University of Aberdeen, noted for the careful, painstaking industry of its hard- and long-headed graduates. Most of them who can afford it go in for the art classes as well, and have the M.A. as well as the M.D. Aberdeen permits of its M.D. being taken by qualified men after a residence of one winter, and many good men and true go to the granite city for this purpose when meditating taking a step forward in life. It thus occupies a posi-

tion like that once held by Edinburgh as regards English graduates. In Glasgow there is also a university conferring the usual degrees; the Anderson University being merely an economical teaching institution. Besides the University of Glasgow, there is the Faculty of Physicians and Surgeons, with its two diplomas, the license and the fellowship, the latter little known except in the west of Scotland. The license has a wider area, and a somewhat questionable character as a refuge for those who have failed elsewhere, however far this reputation is deserved. In order to meet the requirements of the English Poor-Law Service, the College of Physicians in Edinburgh made arrangements with the Edinburgh College of Surgeons to grant their conjoint diplomas after one compound examination, so that "the double," as it is termed, carries the requisite medical and surgical qualification required by law for poor-law appointments. This conjoint examination has never called forth critical comment, as the examinations of the Edinburgh College of Surgeons are of high testing power. But the Edinburgh College of Physicians also made arrangements with the Glasgow Faculty of Physicians and Surgeons for a similar "double," the Faculty diploma to stand as a surgical qualification; and this has evoked a good deal of bitterness, it being alleged that while the examination questions look well on paper, a low standard of answer is adopted, so that inferior men may pass. But this may be merely scandal or ill-nature on the part of the other diploma-granting bodies.

It will be evident from the foregoing that considerable confusion exists in the medical profession in Great Britain, as any of the above-mentioned degrees or diplomas entitles a man to be on the Medical Register and so to practise anywhere and anything that will go. A man holding the license of the Faculty of Glasgow may practise alongside an M.D. London, and beat him if he can; and in fact he sometimes does. An apology may be due to the Glasgow faculty for the position it occupies in the above comparison; but all comparisons are unsavory.

But this is not all: there are the Irish qualifications still to be reckoned with. The writer does not feel so thoroughly at home with the Irish qualifications, and so may do injustice; but it is not by design or malice.

In the first place comes the University of Dublin (Trinity College), granting the usual degrees and also a license in medicine. Then there is the Queen's University, with three teaching colleges, Belfast, Cork, and Galway: it grants degrees in medicine and surgery. There is also an Apothecaries' Hall in Ireland, and its qualification entitles the holder to practise in England if he pleases, and is a qualification in medicine for public appointments. Ireland, too, has its Royal College of Surgeons, with license and fellowship of unimpeachable reputation. It has also another diploma-granting institution, the King and Queen's College of Physicians in Ireland, first incorporated in the time of Charles II., and then re-incorporated under its present title under their majesties King William and Queen Mary, A.D. 1692. This venerable institution must be spoken of with due regard to its years, but, unless it is foully slandered, it passes through its portals some indifferently educated people. As I do not know any of its licentiates, I may be in error, but nothing personal is intended. It is said to meet a want in the country of its adoption, and to deserve well of its licentiates, but it is not in great favor in England. It furnishes a large number of the candidates for the army and navy services; but as I am a man of peace, and not remarkably endowed with personal courage, any comments in the present troubled state of the services might be followed by unpleasant consequences, as the Hibernian is notoriously combative: so they will be withheld. This institution has recently opened its portals to the lady students, with the gallantry for which the Irish are famous, and this may have added to its unpopularity.

Such is the confusion reigning amidst medical corporations granting licenses to practise, and the universities conferring degrees which are also legal qualifications, and out of which the General Medical Council will have to make law and order, or fail. Failure is infinitely more probable, and it is likely that at last the State must interfere, and have one general "State examination," after passing which each man may take what degree or diploma he chooses, as ambition or caprice may dictate. Any one of the numerous qualifications given above will entitle a man to have his name on the Medical Register, after which he can practise anywhere and anything. It is only for public appointments that certain definite qualifications are absolutely necessary: thus, for instance, both a medical and a surgical qualification are required for poor-law appointments; the Membership of the College of Physicians, or the Fellowship of the College of Surgeons, for all staff appointments at the metropolitan hospitals of good repute.

There are beyond these qualified practitioners a certain number of irregular and unlicensed practitioners. First comes the large class of druggists and chemists who prescribe across the counter, and who do a very extensive business therein, doubtless doing much good mixed up with no little harm, but who are very faithfully believed in by their clients, especially the poor. A battle is going on to stop this counter practice of chemists in the interest of the general practitioner; while the chemists, in their turn, are striving to put down the practice of medical men making up their own medicines instead of sending prescriptions to be dispensed. Then comes a body of irregular practitioners who have no

legal qualification either as practitioner or chemist, but either have foreign diplomas not recognized by the British authorities, or else bogus degrees: and this enterprising body has so harassed the regular practitioners that a society of the latter has recently been formed to prosecute them under the Medical Act, and legal proceedings against them have been pretty active of late. Then there are quacks of low degree, who are herbalists, or possess salves of secret composition, often of no small value, whatever may be said of them,—for the writer well remembers how such a quack once made him look very small over a case of obstinate ulceration of the leg on which he had fruitlessly bestowed no small pains. A poultice of carrots or turnips, boiled and mashed, often gives great relief to knots of varicose veins when undergoing subacute inflammatory action, and may often be resorted to with advantage in such cases before using lead and opium lotion. Such quacks are found chiefly in the low quarters of towns, where they enjoy much local repute. The water doctor, who made his diagnosis solely by examination, usually merely ocular, of the urine, and who flourished in the times of Sir John Falstaff, is now nearly extinct. A family of them existed in Yorkshire up to a very recent period, but the last one died a year or two ago. The family possession of certain qualities, as well as secret remedies, divulged often as deathbed revelations of priceless value, and really constituting heirlooms not to be despised in a pecuniary sense, is not so strongly believed in now as of yore, but the belief still lingers here and there. Cures for stone are no longer purchased by the national authority, and recipes for the certain and immediate cure of hydrophobia now only find their way into the newspapers in the form of a letter from some credulous clergyman who believes himself possessed of some knowledge of medicines.

A better-founded claim to special knowledge may be made out in favor of bone-setters, a body of men exceedingly offensive to rural practitioners. Quite common are these families throughout the country, and they often succeed where the regular practitioner has failed, to the great chagrin of the latter. The bone-setter is usually a man possessed of great manual dexterity, with some legendary information of considerable value, and, as he gets a fair amount of practice, his hand is kept "well in," usually better "in" than the medical men around him. He also uses much more violence, and so not rarely succeeds in reducing dislocations where surgeons have failed; but, while this not uncommonly gets him much prestige, it is the most dangerous of his gifts, and often gets him into trouble in the case of diseased joints, which are made much worse by his severe manipulation. This possession of the bone-setting faculty is of no small utility to many families, and forms a comfortable addition to their income, and is really valuable to a family of handicraftsmen who often possess considerable skill, chiefly derived from their manual dexterity. From ignorance of anatomy, they often explain the good they do by attributing it to the reduction of some small bone in a large joint, which small bone the doctor well knows does not exist. But the patient readily swallows the explanation when served with the sauce of restored motion and freedom from pain. Recently a book has been written on bone-setting, in which the practices of a bone-setter of high reputation in London are set forth by a medical man who for long was admitted to watch his method of proceeding. It will well repay perusal, and shows how the regular practitioner has derived no small portion of his knowledge from his irregular ancestral specialists. From such specialism the general practitioner was evolved, and into specialism the higher order of the profession must develop again as the stores of knowledge accumulate. Such are our medical men, regular and irregular: some get a bit of information how and where they can, and often make excellent use of it; others are highly and systematically trained from the outset, and yet do little: indeed, it may be said of some of them,

> "They never sing,
> But die with all their music in them;"

and not rarely the music found in them at death does not exist in any very disturbing amount.

PROCEEDINGS OF SOCIETIES.

PATHOLOGICAL SOCIETY OF PHILADELPHIA.

THURSDAY EVENING, APRIL 12, 1877.

THE PRESIDENT, DR. H. LENOX HODGE, in the chair.

Intracapsular fracture of femur—Thrombosis of left femoral vein extending to vena cava. By Dr. J. C. WILSON.

THE specimen was removed from the body of a gentleman aged 67, who weighed one hundred and sixty-seven pounds. He fell upon the sidewalk, January 24, and received the full force of the blow upon his left hip. Shortly afterwards he was etherized and examined by Dr. Wilson and Dr. J. H. Brinton.

The foot was markedly everted; there was a shortening of the limb of apparently one-half inch; the arc described by the great trochanter in rotation seemed to be of shorter radius than that of the opposite side; after free movement, crepitus was felt; it was, however, obscure.

A diagnosis of fracture (intracapsular?) of the neck of the femur was made.

The treatment selected was weight-and-pul-

ley extension, and counter-extension by elevating the foot of the bed. Sand-bags were employed.

Four days afterwards, signs of pelvic cellulitis supervened. These shortly subsided. February 12, the leg became swollen, tense; there was occlusion of the femoral veins, and inflammatory infiltration of the tissues in the line of the great vessels. Fever set in, the temperature rose to 102° Fahr., and remained between 99½° and 102° until he died, March 26. A bedsore had formed over the sacrum. The urine was not albuminous. Liver dulness was enlarged. There were no pulmonary symptoms. Heart-sounds feeble; the first valvular. The pulse feeble; no murmur.

The *post-mortem examination*, made twenty-six hours after death, confirmed the diagnosis of intracapsular fracture. In addition, the heart was found fatty, the lungs slightly adherent but otherwise normal; the liver fatty, and the kidneys cirrhotic. There were evidences of inflammation on the inside of the pelvis opposite the acetabulum, thrombosis of the left femoral and iliac veins extending to the vena cava, as shown in the specimen, with inflammatory infiltration of the tissues surrounding these vessels.

Dr. C. B. NANCREDE said that this case of thrombosis of the iliac vein was interesting in connection with the paper he read before the Society a year ago, furnishing an illustration of what he then tried to prove. Here is an injury, a blow over the region of the trochanter major. We know that even a slight blow will produce clotting in the smaller veins, and inflammatory action will be set up by these—the venous clots—in the surrounding tissues. In the venous clot we have present one of the factors necessary for the formation of a clot,—viz., the fibrino-plastin, in the shape of the blood-cells. Now let blood containing an excess of the second necessary factor—namely, *fibrinogen*—resulting from the retrograde metamorphosis of tissues, etc.—reach the preformed clot containing the fibrino-plastin, and it will go on extending until no more blood running from the inflamed spot can reach it. In the case before the Society that point should be about the brim of the pelvis, since normally all the blood from the injured territory would be emptied into the femoral below this point.

Upon examining the specimen, however, we find that it extends still higher. How can this be explained? In one of two ways: either blood containing retrograde matter was conveyed from the acetabulum through the pelvic bones, and thus was poured into the external iliac through the internal iliac vein, or, what is still more probable, the clot, irritating the tissues at the brim of the pelvis, owing to the greater pressure due to the subjacent bone, established a new depot for the absorption of inflammatory products, and thus extended the clotting until all venous blood-supply was prevented from reaching the thrombosed vein from the inflamed extremity. This second inflammatory depot is not assumed for the purpose of explanation, but is specially noted by Dr. Wilson in his remarks.

Dr. HODGE said the specimen was interesting from several points of view. First, the fact of embolism being present was of great interest as regards the origin of the clot. A slight cause will produce a clot when least expected. He recalled a case which occurred at the Presbyterian Hospital, in which a leg had been amputated by Dr. T. B. Reed on account of disease of the ankle-joint. When the patient had almost recovered, and the wound was nearly healed, the opposite thigh became very much swollen and tender over the femoral vein, and there was every reason to suppose a clot had formed in it. This condition presented itself immediately after the man was first lifted from his bed. He recovered.

Another point of interest was in reference to the formation of bony nodules in the capsule around the joint. They do not occur uniformly, and their explanation is more or less difficult. He thought the most reasonable explanation attributed them to fragments of periosteum displaced at the time of fracture, just as the periosteum produces bone after transplantation.

Another point of interest is the apparent injury to the inner surface of the pelvis opposite the acetabulum. He thought this could be accounted for in two different ways. It was possibly due to the direct effects of the original injury, as the acetabulum may be broken by the head of the femur driven forcibly against it. Or this condition may arise from inflammatory action causing softening of the bone.

Still another point, Dr. H. thought, was that notwithstanding the absence of callus, which is characteristic of injuries in this locality, a great degree of firmness exists. Whether this is due to an attempt at union, or whether this is one of those rare cases of partial fracture of the neck of the femur, can only be determined by sawing the bone.

A final point of interest, he thought, was the preservation of the round ligament, which from its direction, as the members of the Society may notice, bears out the inference that one of its uses is to aid in the support of the body by bearing a portion of its weight in the erect position.

Dr. WILSON said that the crepitus, the limitation of the arc of a circle described by the trochanter major, together with the shortening, led them to believe the fracture was a complete one.

Dr. NANCREDE thought that there was no evidence of any union. The limb had never been stepped upon, and therefore there was none of the ordinary displacement usually

seen, and the apparent union was only the result of the interlocking of the fragments.

He thought that if he had taken a few more steps there would have been no doubt about the presence of a complete fracture. Repair was impossible with such interruption to the circulation as existed. The edges of the fragments were as sharp as if broken but yesterday, and, as is well known, the first step towards union should be a proliferation of the connective-tissue cells of the adventitia of the Haversian vessels. This would induce absorption of the earthy matter of the bone, and rounding of the edges of the fragments would ensue.

A needle found post-mortem within the cranium. By Dr. H. LENOX HODGE.

Upon removing the calvaria of a subject in the anatomical rooms of the University of Pennsylvania, a sewing-needle of medium size was found lying on the right hemisphere of the brain, nearly parallel to the superior longitudinal sinus, about an inch distant from it, and about an inch and a half behind the fronto-parietal suture. The point and the eye of the needle were both unbroken. The point was directed backwards. The needle was much oxidized, and attached to the arachnoid surface of the dura mater by old bands of lymph near the larger extremity of the needle.

No history of the cadaver, an adult male, could be obtained.

The needle appears to have given rise to no important changes, and had no apparent connection with the cause of death. The man seems to have died of phthisis.

It is a matter of interest how the needle reached this position. Other methods might be suggested, but it is most probable that it entered the anterior fontanelle during infancy, and thus passed to the place where it was found.

Dr. HAMILTON OSGOOD asked what was the appearance of the needle.

Dr. HODGE replied that it was black and tarnished.

Dr. SINKLER thought it most likely that it had entered the fontanelle during infancy, as by no muscular contraction could it obtain the position in which it was found.

Dr. F. P. HENRY said his experience went to show that instead of corrosion of needles long buried in animal tissue, there was an actual addition of new material. A short time ago he had removed with great difficulty a needle from the biceps muscle of a girl. It was three times the thickness of an ordinary needle, very rough and uneven, and covered with a hard mineral-like deposit, to which was owing the increase in thickness.

Dr. WILSON recited the case of a sewing-girl who was said to have swallowed a paper of needles, many of which were removed from different parts of the body. These were all smooth, but blackened and tarnished. He had recently removed from the foot of a boy a needle which had been imbedded four months. It was simply tarnished.

Dr. SINKLER had removed a needle from a foot after it had been there imbedded for three months. It was smooth and blackened, but not corroded. He placed it in his pocket-book, and on examining it after a few weeks he observed that the rusting process had taken place.

Dr. RICHARD A. CLEEMANN said that he had made use of the fact that a needle after being imbedded in tissue for a certain length of time becomes tarnished. He had extracted a fragment of needle, and was anxious to determine whether it was all that entered the foot. The broken end was tarnished. He fractured the needle, and, observing that the fractured ends presented the usual steel-like lustre, he concluded that he had removed the whole fragment. Had he broken it off, the fractured end of the removed portion would have been bright.

Gangrene of the epiglottis. By Dr. CARL SEILER.

The patient, a man, presented himself at the infirmary of the German Hospital. Nearly one-half of the larynx had sloughed off in two weeks. The odor was so horrible that a laryngoscopic examination was almost impossible. The man was recommended to go to a general hospital, and has not been heard of since.

REVIEWS AND BOOK NOTICES.

THE GERM THEORY OF DISEASE. By T. MACLAGAN, M.D. London, 1876.

We commend this book most heartily to any one desirous of knowing upon what slight foundations the "germ theory" at present rests, and of wondering at the power which man has of evolving from his inner consciousness, if only the little word *if* be granted. The germ theory is not only absolutely unproven, but is apparently further from being proven than it was ten years ago. Although an enormous amount of effort has been made to lift it out of the slough of doubt, it still remains among the rhetorical problems.

We have no space to follow Dr. Maclagan through his ingenious speculations, and must confess to an absence of enthusiasm for the work. In science the day of faith seems to us forever past, and hard, close observations, discovery of new facts, new testing of old facts, solid, slow building-up of generalizations, remain the only work worthy of attention. Theorizing from analogy may be useful to the investigator as a means of laying out work, but is of just such value and no more. Books of a character like that before us should be classed and enjoyed as "works of the imagination," not as scientific treatises. From this stand-point we repeat

that Dr. Maclagan's effort is a most laudable one, and the result gives him a high rank among writers of fiction.

FRUIT AND BREAD. Translated from the German of GUSTAV SCHLICKEYSEN by M. L. HOLBROOK, M.D.

This book is the forerunner of a feminine millennium, when builders of ranges and cooking-stoves shall have sunk into a perdition of utter ruin, and Biddy shall no longer from her fortress in the rear tyrannize over the household. Whether some misguided males will not sigh for the flesh-pots of Egypt and the slavery of Bridget, we do not dare to express an opinion upon. Cooking is to be done away with; but, owing to the hardness of our hearts, and his own great tenderness, M. Schlickeysen does not demand that it shall be abandoned at once. He says, "We must concede that it is in almost every case injurious, and that it should be dispensed with so far as our present habits of life will admit of, and with a view to its final and complete disuse."

To any of our readers who desire to learn how to make a considerable journey "with a few apples in the pocket," we heartily commend the volume. Like the doctor who said to his rheumatic patient, "Be sure and tell me if that prescription does you good, as I have the rheumatism myself," we should be glad to hear the report. Schlickeysen is the apostle of apples and wheat, on which, *in puris naturalibus*, he is convinced the race ought to subsist. We are afraid an adaptation from "Mother Goose" would accord with the result:

> Apples and wheat were the chief of their diet,
> And yet the whole race would never be quiet.

GLEANINGS FROM EXCHANGES.

THE ASPIRATOR IN STRICTURE OF THE URETHRA (*Med. Press and Circular*).—P. L. O'Neill, Surgeon to Union Infirmary, Athy, reports a case in which he and others vainly attempted to pass a catheter to relieve retention of urine. The bladder being greatly distended and the patient's sufferings intense, he aspirated it, and in twenty minutes after the operation introduced a No. 1 catheter with the greatest ease. By degrees larger sounds have been introduced, and the patient is happily progressing.

FATAL POISONING BY OIL OF CHENOPODIUM.—In the *American Medical Bi-Weekly*, July 21, Dr. M. R. Wright reports cases of poisoning by wormseed oil. The following is an abstract of the most interesting one:

Case III.—Mr. Morgan, aged twenty-two, a farmer; constitution rather delicate; previous health good; took, thinking he was "wormy," about two drachms of the oil of chenopodium with some sugar. In about three hours he complained of sick stomach, and was vomited two or three times with salt-and-water. In a short time he began to complain of deafness, and in ten hours after taking the oil he was completely deaf. Complained of nothing else, and ate a moderately hearty supper. In the forenoon of the 19th, condition about the same; went about the house and took some nourishment. In the afternoon he became irrational. On the 20th, condition much worse; blind and unable to speak. Parents now became alarmed, and sent for a physician, Dr. C. J. Slaughter. He found him on his arrival (10 A.M.) perfectly insensible; pupils dilated; surface cool; pulse 120 and feeble. Convulsions came on very soon, and continued to recur at intervals of half an hour or more until his death on the 21st, seventy-six hours after taking the poison. Revulsives and chloral hydrate were freely used, but without making any perceptible impression.

RATTLESNAKE-BITE—RECOVERY.—In the *Medical and Surgical Reporter* of July 21, Dr. J. J. Knott reports a case of severe bite of rattlesnake successfully treated by a very large number of injections of carbonate of ammonium (amount not stated) into the veins, aided by some pints of whisky and many grains of quinine. The doctor attributes the recovery to the ammonia, and noticed an immediate alteration in the color and crasis of the blood following its use.

ANEURISM OF HEPATIC ARTERY.—A case of this rare affection, with death from multiple abscess in the viscus, is reported in the *Canada Medical and Surgical Journal*, July, 1877.

MISCELLANY.

BOYLSTON MEDICAL PRIZE QUESTIONS.—At the annual meeting of the Boylston Medical Committee, held June 4, 1877, it was voted that no dissertation worthy of a prize had been offered on either of the subjects proposed for 1877.

The following are the questions proposed for 1878:

1. Antiseptic Treatment. What are its essential details? How are they best carried out in practical form?

2. Diphtheria: its causes, diagnosis, and treatment.

The author of a dissertation considered worthy of a prize, on either of the subjects proposed for 1878, will be entitled to a premium of seventy-five dollars.

Dissertations on the above subjects must be transmitted, postpaid, to J. B. S. Jackson, M.D., Boston, *on or before the first Wednesday in April*, 1878.

The following are the questions proposed for 1879:

1. The relation of animal contact to the disease known as hydrophobia.

2. Evidences showing that so-called "filth diseases" are not dependent upon "filth."

The author of a dissertation considered worthy of a prize, on either of the subjects proposed for 1879, will be entitled to a premium of two hundred dollars.

Dissertations on these subjects must be transmitted as above on or before the first Wednesday in April, 1879.

Each dissertation must be accompanied by a sealed packet, on which shall be written some device or sentence, and within which shall be enclosed the writer's name and residence. The same device or sentence is to be written on the dissertation to which the packet is attached.

The writer of each dissertation is expected to transmit his communication to the President of the Committee, J. B. S. Jackson, M.D., in a distinct and plain handwriting, *and with the pages bound in book-form*, within the time specified.

Any clue by which the authorship of a dissertation is made known to the committee will debar such dissertation from competition.

Preference will be given to dissertations which exhibit original work.

All unsuccessful dissertations are deposited with the secretary, from whom they may be obtained, with the sealed packet unopened, if called for within one year after they have been received.

THE HEALTH OF MADEMOISELLE TITIENS.—Very erroneous reports have appeared as to the state of Mademoiselle Titiens since her departure from London. As Mr. Spencer Wells was the operator, it was hastily assumed that he had removed an ovarian tumor, whereas the symptoms were all due to obstructed intestine and chronic peritonitis, with effusion of fluid into the peritoneal cavity. Mr. Wells opened the cavity, removed eighteen pints of fluid, and released the intestine, with immediate relief to the urgent symptoms, and he had the great satisfaction of attending, with Dr. Howell, F.R.C.S., of St. John's Wood, during recovery, which went on without a bad symptom. The wound healed by first intention, and Mademoiselle Titiens had taken two drives before she went to Worthing. The journey there, in a royal-saloon carriage badly coupled, was unusually trying, and for some days there was cause for anxiety, but the last reports are favorable.—*London Lancet.*

CAMPHOR VAPOR BATHS.—These baths are used with asserted very good effects in the Queen's Hospital, Birmingham, for the relief of chronic Bright's disease. They are said to produce very free perspiration, and are given every night in the following manner. The patient is seated upon a cane-bottomed chair, with a large blanket pinned round his neck. Half an ounce of camphor is placed upon a tin plate under the chair and above the flame of a small spirit-lamp, by the heat of which the camphor is slowly vaporized. Dr. Sawyer also employs camphor fumigation in some cases of convalescence from acute or subacute rheumatism, where the action of the skin is defective, and where there remain some pain and stiffness of the joints.—*British Medical Journal.*

MALE WET-NURSES.—The *Journal des Sages-Femmes* has a notice of a German physician in Pomerania who makes a specialty of supplying wet-nurses. He excites the secretion of milk, not only independently of pregnancy, but in men as well as women. An applicant for a wet-nurse is always asked whether a *male* or a *female* is desired. The former is preferred by some families, under the belief that greater vigor is thus imparted to the infants.

HUMAN MILK FOR SALE.—Chinese women sell their milk for about fifty cents per pint. The milking is performed in public, to insure purity. It is highly esteemed as a nourishing food for old people and consumptives.

TETANUS PRODUCED BY A HYPODERMIC INJECTION OF CHLORAL.—Dr. W. G. Hunlis reports (*Transactions of the Bombay Medical Society*) a fatal case of tetanus produced by a hypodermic injection of chloral.

THE SYRACUSE UNIVERSITY requires, in its medical course, attendance upon three years of instruction; the year being made up of two sessions between the first day of October and the last Wednesday of June.

A COTEMPORARY states that coating eggs with linseed oil will preserve them for some months.

OFFICIAL LIST

OF CHANGES OF STATIONS AND DUTIES OF OFFICERS OF THE MEDICAL DEPARTMENT U.S. ARMY FROM JULY 15, 1877, TO JULY 28, 1877, INCLUSIVE.

SWIFT, E., LIEUTENANT-COLONEL AND ASSISTANT MEDICAL PURVEYOR.—Relieved from duty as Medical Director of this Department, to enable him to comply with S. O. 147, c. s., A. G. O. G. O. 6, Department of the Gulf, July 18, 1877.

ALDEN, C. H., MAJOR AND SURGEON.—Telegraphic instructions of 30th ult. to proceed from Fort Townsend, Wyoming Territory, to Lewiston, Idaho Territory, and report at once to the Department Commander in the field, confirmed. S. O. 90, Department of the Columbia, July 6, 1877.

KINSMAN, J. H., CAPTAIN AND ASSISTANT-SURGEON.—Leave of absence extended one month. S. O. 165, Division of the Atlantic, July 26, 1877.

MATTHEWS, W., CAPTAIN AND ASSISTANT-SURGEON.—To proceed to-morrow to Boisé City, Idaho, and join Major Greene's command with the least possible delay. S. O. 88, Division of the Pacific and Department of California, July 17, 1877.

DICKSON, J. M., CAPTAIN AND ASSISTANT-SURGEON.—Granted leave of absence for thirty days, on Surgeon's certificate of disability. S. O. 120, Department of the Gulf, July 13, 1877.

BUELL, J. W., FIRST-LIEUTENANT AND ASSISTANT-SURGEON.—So much of paragraph 5, S. O. 127. c. s., from these Headquarters, as directs him to accompany Companies D and I., 10th Cavalry, to Fort Clark, is revoked. S. O. 129, Department of Texas, July 16, 1877.